



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,784	09/29/2006	Hideyuki Ono	121036-0096	7107

35684 7590 10/06/2009

BUTZEL LONG  
IP DOCKETING DEPT  
350 SOUTH MAIN STREET  
SUITE 300  
ANN ARBOR, MI 48104

EXAMINER
----------

REDDY, KARUNA P

ART UNIT	PAPER NUMBER
----------	--------------

1796

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

10/06/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATENT@BUTZEL.COM  
BOUDRIE@BUTZEL.COM

<b>Office Action Summary</b>	<b>Application No.</b> 10/594,784	<b>Applicant(s)</b> ONO ET AL.	
	<b>Examiner</b> KARUNA P. REDDY	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10, 12 and 14-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 12 and 14-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This office action is in response to the amendment filed 6/22/2009. Claims 1 and 15 are amended; and claims 9, 11 and 13 are cancelled. Accordingly, claims 1-8, 10, 12 and 14-16 are currently pending in the application.

Given that amendments do not affect the scope of instant claims and the grounds of rejection remain unchanged from that set forth in the preceding office action, it is proper to make this action final.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

3. Claims 1-8, 10, 12, and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moriyama et al (US 6, 156, 849) in view of Hiramatsu et al (JP 61-171737) and Ueshima et al (US 5,502,095).

The rejection is adequately set forth in paragraph 3 of office action mailed 3/25/2009 and is incorporated here by reference.

### ***Response to Arguments***

4. Applicant's arguments filed 6/22/2009 have been fully considered but they are not persuasive. Specifically, applicant argues that (A) examiner has relied upon Ueshima et

Art Unit: 1796

al as teaching an “elastomeric composition comprising rubber” that has “improved .... compression set (abstract).” However, Ueshima et al teach using a rubber component such as carboxyl group-containing acrylic elastomer for improving compression sets of thermoplastic polyester elastomer and does not teach or suggest that imidazole type antioxidants have any effect on improving compression set of carboxyl group-containing acrylic elastomers; (B) Moriyama et al, does not teach applicant’s claimed wall thickness; and (C) references of Moriyama et al and Hiramatsu are not combinable because, while instant invention and Moriyama et al use polyvalent amine compound as vulcanization agent, Hiramatsu relies upon primary crosslinking with sulfur based compound followed by secondary crosslinking using gamma radiation rays.

With respect to (A), contrary to applicant’s allegation, it is Hiramatsu who teaches that elastomers subjected to crosslinking with S-containing compounds, such as thiazoles, exhibit low permanent compressive strain. Furthermore, Ueshima et al is used for its teaching that antioxidants in combination of two or more can be added to elastomeric compositions and include thiazoles, phenols and amine based antioxidants.

With respect to (B), as stated earlier and reiterated here, given that the composition, of Moriyama et al in view of Hiramatsu and Ueshima et al, is substantially similar to that of the present claims and the use of vulcanized molding material as a seal member (reads on gaskets or o-rings) is recognized (abstract) by Moriyama et al, it would have been within the scope of a skilled artisan to mold the article to a desired thickness (such as the thickness in present claims) depending on the end use requirements.

With respect to (C), Moriyama et al and Hiramatsu et al are combinable because both teach the use of crosslinking agents in elastomer compositions. Hiramatsu et al

Art Unit: 1796

provide the motivation to use S-based crosslinking agents in elastomeric compositions i.e. addition of S-based thiazole compounds to elastomeric compositions improves compression set characteristics of elastomeric compositions.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KARUNA P. REDDY whose telephone number is (571)272-6566. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone

Art Unit: 1796

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. P. R./  
Examiner, Art Unit 1796

/Vasu Jagannathan/  
Supervisory Patent Examiner, Art Unit 1796